

Survival Patterns

of the Postwar Business Population

THIS article presents for the first time comprehensive data on the age distribution of the business population of the United States and the survival experience to date of businesses formed in the postwar period. These data provide basic background information useful not only for general analysis of the dynamics of our business economy but also of special interest to business and credit analysts concerned with particular sectors of industry.

Summary of results

Three-fifths of the 4 million businesses which were in operation in the past year had been newly established or acquired by transfer since the end of World War II. The median age of all operating businesses was about 4½ years—that is, half of the operating businesses were older and half younger than this age.

Half of the 5½ million firms which were newly established or acquired during the postwar period (1946-51) had been sold or liquidated within about 2 years. To put it another way, on the basis of postwar experience there was an even chance that a newly acquired firm would last 2 years under the same management. The changes dropped to about 1 out of 3 that such a firm would live to the age of 4. Lack of profitability, however, was by no means the only reason for the sale or liquidation of a business.

Among the younger firms, the longer a new concern endured, the greater was its life expectancy. At birth (or time of transfer), for example, the expectation that a firm would survive its first year was about 2 out of 3 but by the time a firm reached the age of 3 its chances of living to age 6 had increased to about 7 out of 8.

Wholesale trade firms had the best survival record: nearly four-fifths survived the first full year of operation under the

same management, and 45 percent survived 5 years. At the other end of the scale were firms classified in retail trade where less than 65 percent survived the first year and only one-fifth reached the age of 5 years.

Small firms predominate in business population

Survey readers are familiar with the broad pattern of change in the business population since 1943, when business birth, death and transfer data first became available. From the beginning of 1944 to the end of 1951, the terminal date of the present study, more than 7 million firms were newly established or acquired by transfer. About 6 million businesses were sold or liquidated over the same period so that there was a net increase of 1 million over the 3 million firms in existence at the end of 1943.

It will also be remembered that by far the largest part of the business population is composed of small concerns and hence the great postwar turn-over reflected the entry and exit of such businesses. Seventy-five percent of all operating businesses had less than 4 employees in 1948, the most recent period for which size-of-firm information is available. The concentration of business turn-over among the small companies is even more striking: 86 percent of all new and discontinued businesses and 83 percent of the businesses transferred in 1948 had fewer than 4 employees. A substantial proportion of these very small firms operated with no paid employees.

In this light, it is apparent that most of the findings of the present study apply primarily to very small concerns.

Nature of the data

The estimates of age distribution and life expectancy are fitted into the framework of the regular Office of Business

NOTE—MISS CHURCHILL IS A MEMBER OF THE BUSINESS STRUCTURE DIVISION, OFFICE OF BUSINESS ECONOMICS.

Table 1.—Number of Firms in Operation and Number of Businesses Sold or Liquidated 1944-51 by Year of Acquisition

(Number of firms—thousands)

| Year of acquisition | Total businesses started 1944-51 2 | Firms remaining in operation under the same ownership on December 31 1 | | | | | | | | Firms sold or liquidated | | | | | | | |
|---------------------|------------------------------------|--|---------|---------|---------|---------|---------|---------|---------|--------------------------|-------|-------|-------|-------|-------|-------|-------|
| | | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 |
| 1951 | 821.2 | | | | | | | | 043.2 | | | | | | | | 178.1 |
| 1950 | 804.0 | | | | | | | 080.3 | 181.7 | | | | | | | 194.4 | 185.5 |
| 1949 | 918.4 | | | | | | 044.6 | 450.4 | 345.2 | | | | | | | 173.8 | 182.2 |
| 1948 | 800.0 | | | | | 705.4 | 482.1 | 802.1 | 280.8 | | | | | | 194.5 | 233.3 | 130.1 |
| 1947 | 1,083.7 | | | | 532.5 | 588.9 | 435.6 | 845.2 | 280.7 | | | | | | 201.2 | 213.5 | 153.4 |
| 1946 | 1,270.5 | | | 975.8 | 864.9 | 529.7 | 414.9 | 344.5 | 293.1 | | | 304.2 | 281.1 | 173.6 | 106.5 | 70.4 | 40.4 |
| 1945 | 877.4 | | 702.8 | 800.4 | 372.6 | 306.3 | 348.4 | 224.7 | 190.3 | | 308.0 | 308.4 | 121.7 | 70.3 | 47.8 | 35.7 | 25.5 |
| 1944 | 605.4 | 556.1 | 400.7 | 808.7 | 245.5 | 308.9 | 152.5 | 167.4 | 141.0 | 110.3 | 154.4 | 97.0 | 58.2 | 25.0 | 25.4 | 23.1 | 15.4 |
| Prior to 1944 | 2,985.8 | 2,987.1 | 2,239.9 | 1,083.8 | 1,795.0 | 1,045.5 | 1,535.2 | 1,415.1 | 1,320.0 | 393.7 | 277.2 | 270.5 | 183.8 | 147.7 | 123.6 | 110.1 | 59.1 |
| All years | 10,396.0 | 3,142.2 | 3,349.3 | 3,762.7 | 3,947.4 | 3,381.1 | 3,363.3 | 3,865.4 | 4,014.0 | 589.0 | 650.2 | 846.1 | 849.0 | 564.3 | 448.2 | 532.2 | 283.9 |

1. The number of firms remaining in operation December 31, 1944-51, by year of acquisition are shown by major industry division in table 6.

2. For the years 1944-51, all firms newly established, reorganized, purchased or otherwise acquired by transfer; for years prior to 1944, all firms in operation, December 31, 1943. The total in the columns is equal to the sum of all sole proprietorships and other unincorporated

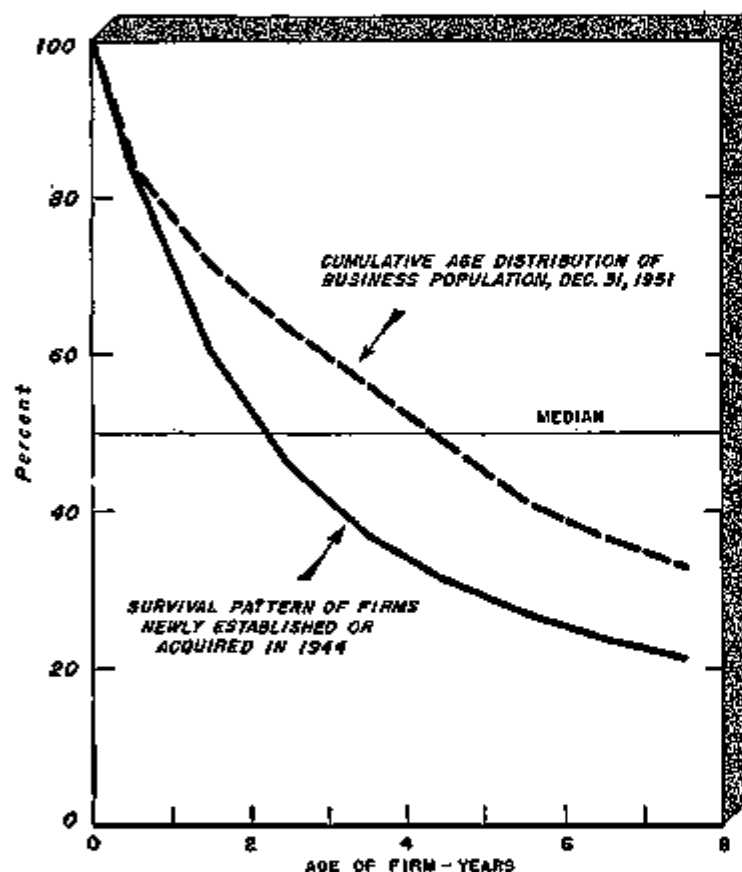
entities counted separately for each business operated at any time during the period 1944-51. Note.—Detail will not necessarily add to totals because of rounding.

Source: U. S. Department of Commerce, Office of Business Economics.

Economics series on the business population and further extend the information on American enterprise available from this source.¹ The present study is based in part on statistics relating to the age of firms which are sold or liquidated, supplied by the Bureau of Old Age and Survivors Insurance of the Social Security Administration. In this context, therefore, it is important to note that the "age" of existing firms refers to the length of time a firm has operated

Vital Statistics of the Business Population

The median age attained by firms newly established or acquired in 1944 is roughly half that of firms in operation in 1951



U. S. DEPARTMENT OF COMMERCE, OFFICE OF BUSINESS ECONOMICS

52-102

under a single ownership dated from the time the most recent owner established or acquired the concern. As used in this report the term "newly acquired" refers to both newly established and transferred firms.²

It is also important to note that the sale or liquidation of a business does not necessarily imply a failure. Past studies have indicated that many businesses are given up because of

1. See "State Estimates of the Business Population: 1944-51" Survey, January 1952, "The Business Population by Legal Form of Organization," Survey, June 1951, "The Size Distribution of the Postwar Business Population," Survey, May 1950, and "Revised Estimates of the Business Population, 1929-48," Survey, June 1949. The revised estimates are shown through the third quarter of 1951, and a revised business transfers series is presented for the period 1944-51 on pp. 14 and 15 of the June 1952 Survey.

2. Because of the nature of the basic data supplied by the Bureau of Old Age and Survivors Insurance it was not possible to measure age from the date of establishment without regard to any subsequent changes in ownership. Transfers include going businesses which are purchased, reorganized whether with or without a change in legal form of organization, or newly acquired by an individual or management group in some other way.

illness or retirement of the owner, or because of alternative opportunities in another business as an entrepreneur or wage earner. In a study made in 1946, for example, it was found that only half of all liquidations and about one-fourth of all transfers were made either to avoid or to minimize a loss.³

Age Distribution and Survival Rates

The age distribution of firms in operation at the end of each year from 1944 through 1951 is presented in the columns in the left section of table 1. Thus the bottom of the 1951 column shows that there were 4,014,000 firms in operation at the end of 1951. Of this number, 643,200 were acquired in 1951, 484,700 in 1950 and so on back to 1944. Firms acquired in all years prior to 1944 are lumped together because the basic information needed for a further breakdown is not available.

In order to clarify the derivation of these age distributions, statistics are presented in the right section in table 1 on the age of firms sold or liquidated. At the bottom of the 1951 column, for example, it can be seen that 793,000 firms were sold or liquidated during 1951, of which 178,100 had been acquired in 1951, 195,500 in 1950, and so on. The total number of firms newly acquired in the 1944-51 period or in operation December 31, 1943 (the extreme left-hand column in table 1), reduced by the number of these firms which were sold or liquidated each year, yields the estimated age distributions of firms in operation.

The age distribution of firms in existence is shown on a cumulative percentage basis by the top line in the first chart for firms in operation at the end of 1951. Fifty percent of the firms were about 4½ years or younger. Close to one-third had been acquired or established before 1944, while over one-fourth were started after 1949.

Survival patterns of new firms

The age distribution, in turn, reflects the number of new business acquisitions and their survival experience. The survival pattern for concerns acquired in a particular year (shown for each year in table 2) is obtained by relating the

Table 2.—Survival Patterns 1944-51: Percent of All Newly Acquired Firms Remaining in Operation at the End of Each Successive Year

| Year of acquisition | Percent in operation December 31 | | | | | | |
|---------------------|----------------------------------|------|------|------|------|------|------|
| | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 |
| 1951 | | | | | | | 78.8 |
| 1950 | | | | | | | 56.1 |
| 1949 | | | | | | 76.6 | 42.2 |
| 1948 | | | | | 78.4 | 61.7 | 32.2 |
| 1947 | | | | 80.5 | 47.6 | 42.1 | 28.0 |
| 1946 | | | 78.7 | 60.0 | 42.0 | 33.5 | 22.8 |
| 1945 | | 80.8 | 57.0 | 43.2 | 45.1 | 29.7 | 22.7 |
| 1944 | 83.4 | 60.2 | 45.0 | 36.0 | 31.4 | 27.1 | 21.2 |

Source: U. S. Department of Commerce, Office of Business Economics.

number of firms remaining in operation at the end of each successive year to the total acquired in the year of origin. The 1944 pattern is illustrated by the bottom line in the first chart. Thus, of the firms that were started in 1944, 83 percent survived until the end of 1944, 60 percent until the end of 1945 and so on, so that by the end of 1951 only 21 percent of such firms were still in existence.

For the business population as a whole, the survival pattern of newly acquired businesses has been remarkably

3. "Business Turnover and Causes of Failure," Survey, April 1947.

stable throughout the postwar period. This may be seen by reading along any diagonal from lower left to upper right in table 2, which gives the percentages of firms acquired in each of the years shown which survived to any given year. The top diagonal, which gives the percentages surviving to an average age of 6 months, shows that regardless of year of acquisition, survival rates varied within the relatively narrow range of 78 to 83 percent. The third diagonal, reflecting survival to at least the age of 2½, shows a similarly narrow range, from 40 percent for the 1948 firms to 46 percent for the 1944 firms.

It is worth noting, however, that the firms acquired during the war years of 1944 and 1945 fared somewhat better than those acquired in later years. Both the number of firms in operation and the number of new businesses were substantially lower in 1944 than in succeeding years. To the extent that numbers are an indication of the degree of competition the concerns established in the early years may well have started in a more favorable environment.

Industry differences in survival rates

Considerable variation in survival patterns by industry is revealed by table 3, which presents the median ages attained by firms newly acquired in each year 1944-49 as well as the proportions surviving 1 and 2 years. Complete survival patterns are not shown by major industry divisions but may be derived from the basic data presented in table 8.

In each year shown, the median age attained was greatest in wholesale trade and finance. Average ages considerably higher than the all-industry figure were also reached by new firms in transportation and construction. In each of these 4 industry divisions the highest median ages were attained by firms acquired during 1944 and 1945. A slight downward

Table 3.—Median Ages Attained by Firms, Newly Established or Acquired, and Percent Surviving 1 and 2 Years by Major Industry Division and Year of Acquisition

| Year of acquisition | All industries | Mining and quarrying | Contract construction | Manufacturing | Transportation, communication and other public utilities | Wholesale trade | Retail trade | Finance, insurance and real estate | Service industries |
|---------------------------------------|----------------|----------------------|-----------------------|---------------|--|-----------------|--------------|------------------------------------|--------------------|
| Median age attained [Years] | | | | | | | | | |
| 1944 | 2.2 | 1.6 | 3.9 | 1.9 | 4.6 | 4.9 | 1.7 | 5.4 | 2.4 |
| 1945 | 2.0 | 1.8 | 4.3 | 2.3 | 3.3 | 4.6 | 1.5 | 5.6 | 2.0 |
| 1946 | 1.9 | 1.9 | 3.0 | 1.9 | 2.4 | 3.4 | 1.6 | 3.4 | 1.8 |
| 1947 | 2.0 | 1.6 | 2.7 | 1.7 | 2.4 | 3.2 | 1.7 | 3.0 | 2.1 |
| 1948 | 1.8 | 1.4 | 2.5 | 1.6 | 2.3 | 3.4 | 1.6 | 2.6 | 1.9 |
| 1949 | 1.9 | 1.8 | 2.8 | 1.6 | 2.6 | 3.2 | 1.6 | 2.8 | 2.1 |
| Surviving one year or more [Percent] | | | | | | | | | |
| 1944 | 71.8 | 64.0 | 77.9 | 69.7 | 79.6 | 87.0 | 67.1 | 83.0 | 73.3 |
| 1945 | 68.9 | 67.1 | 70.8 | 70.9 | 75.7 | 83.9 | 63.7 | 83.2 | 68.3 |
| 1946 | 67.4 | 68.0 | 74.2 | 69.0 | 70.7 | 79.1 | 63.9 | 78.1 | 66.0 |
| 1947 | 68.8 | 66.6 | 75.3 | 65.9 | 71.9 | 78.4 | 65.9 | 77.9 | 69.8 |
| 1948 | 66.5 | 61.4 | 71.8 | 64.7 | 71.0 | 78.0 | 64.0 | 74.5 | 66.6 |
| 1949 | 67.3 | 66.8 | 74.5 | 63.7 | 72.0 | 77.4 | 64.2 | 75.5 | 68.6 |
| 1950 | 67.4 | 63.6 | 72.3 | 67.6 | 74.7 | 80.9 | 63.9 | 76.3 | 67.6 |
| Surviving two years or more [Percent] | | | | | | | | | |
| 1944 | 52.9 | 44.0 | 64.0 | 49.0 | 66.3 | 73.9 | 45.4 | 70.8 | 55.6 |
| 1945 | 50.1 | 47.5 | 66.0 | 54.2 | 60.8 | 70.1 | 42.2 | 71.2 | 49.6 |
| 1946 | 49.0 | 48.8 | 59.5 | 48.5 | 55.0 | 64.1 | 44.5 | 64.0 | 47.6 |
| 1947 | 49.6 | 43.0 | 58.4 | 45.1 | 55.0 | 62.4 | 45.7 | 61.4 | 51.3 |
| 1948 | 47.5 | 40.2 | 55.7 | 43.5 | 54.0 | 62.5 | 43.8 | 57.8 | 48.3 |
| 1949 | 49.0 | 47.6 | 59.6 | 44.3 | 56.7 | 63.1 | 44.5 | 60.1 | 51.1 |

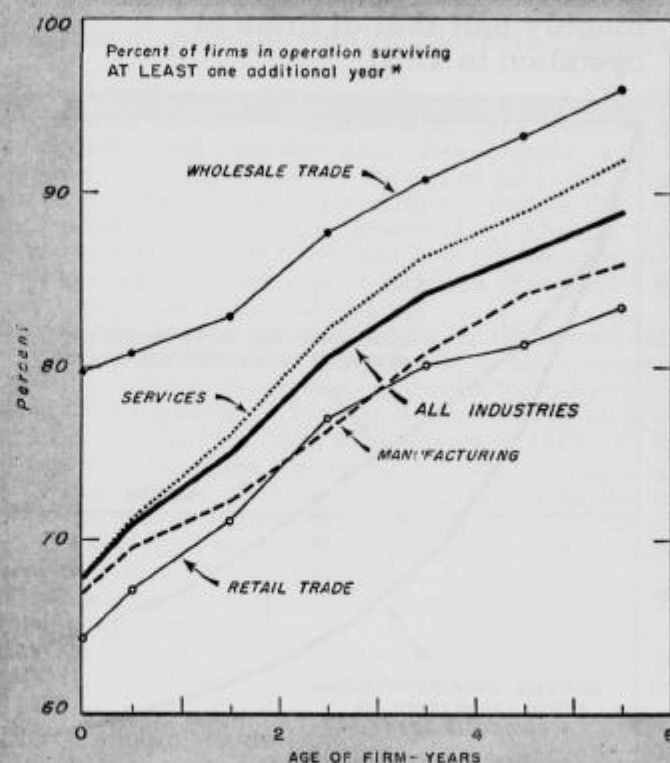
Source: U. S. Department of Commerce, Office of Business Economics.

trend continued after 1946 in contract construction and finance.

The median ages attained by newly acquired firms in the remaining 4 industry divisions cluster within 6 months of the all-industry average in each year. The over-all figure, of course, is heavily influenced by the large proportion of retail businesses. The greatest stability in median ages attained during the whole 1944-50 period is found in the retail trade division.

Life Expectancy

among younger firms varies by industry, but in all cases rises with age



Another approach to industry differences in survival patterns may be seen through the lower sections of table 3, which present the proportions of all newly acquired firms surviving to 1 and 2 years of age. Somewhat more than two-thirds of all newly acquired firms survive their first year of operation and about half survive for 2 years. Relatively low proportions of mining, manufacturing and retail trade firms and high proportions of firms in wholesale trade and in finance attain these ages.

The above-noted differences among the industries persist when the survival patterns for the entire span of ages available are considered, except for manufacturing. Here newly acquired firms survived slightly better than average during the first 2 years of operation but less well between 2 and 6 years.

Life expectancy by age of firm

Of particular interest are the changes which occur in the probability of survival as a firm grows older. Data are available for too short a period to allow setting up full life

expectancy tables for the business population. However, the proportions of firms surviving at least one additional year of operation under the same management are shown by age of firm up to 5½ years in table 4 and by selected industry divisions in the chart. It should be emphasized that table 4 and this chart are based upon the average 1945-50 experience and that deviations from the generally high level of economic activity and business population turnover which

Table 4.—Percent of Firms Remaining in Operation at Least One Additional Year by Age of Firm and Industry Division

(Average 1945-50 experience)

| Age in years | All industries | Mining and quarrying | Contract construction | Manufacturing | Transportation, communication, and public utilities | Wholesale trade | Retail trade | Finance, insurance and real estate | Service industries |
|--------------|----------------|----------------------|-----------------------|---------------|---|-----------------|--------------|------------------------------------|--------------------|
| 0..... | 67.1 | 65.0 | 74.6 | 67.0 | 72.7 | 70.8 | 64.5 | 77.5 | 67.5 |
| 1..... | 70.7 | 67.1 | 72.4 | 69.6 | 70.3 | 67.7 | 67.2 | 70.7 | 71.2 |
| 1½..... | 74.0 | 71.8 | 81.3 | 72.3 | 80.8 | 82.9 | 71.0 | 82.0 | 76.0 |
| 2..... | 80.6 | 78.0 | 84.8 | 78.3 | 88.4 | 87.6 | 77.0 | 84.5 | 82.2 |
| 3..... | 84.2 | 82.6 | 88.2 | 80.8 | 93.0 | 90.7 | 80.2 | 88.7 | 86.4 |
| 4..... | 85.4 | 87.2 | 90.5 | 84.2 | 91.3 | 92.3 | 81.3 | 87.9 | 88.9 |
| 5..... | 88.6 | 88.4 | 90.9 | 85.9 | 92.5 | 96.0 | 83.4 | 89.1 | 91.8 |

Source: U. S. Department of Commerce, Office of Business Economics.

prevailed during this period might, of course, affect to some extent the proportions shown in the chart.

The chart illustrates how life expectancy of a newly acquired firm improves with each year the firm remains in operation. Based on the average 1945-50 experience, and without regard to such factors as the capitalization of the business and the previous training and experience of the management, the chances are about 2 out of 3 that a newly acquired firm will survive its full year of operation. By the time a firm has lived a full year, however, the chance of surviving to age 2 has increased to nearly 3 out of 4, and by the time a firm has reached the age of 5½ the chance of its living another year has increased to almost 9 out of 10.

Increased life expectancy as the firm ages is evident in each major industry division at least up to the age of 5½ years; however, the improvement is much sharper than average in the service industries and as seen in table 4, in mining and quarrying. Although the initial life expectancy of service firms is about average, at the age of 5½ years firms in this group have a life expectancy which is exceeded only by that for firms in wholesale trade and in transportation (not shown in the chart). Moreover, the direction of this curve for the service industries is still sharply upward at 5½ years, while the data for the transportation firms suggest some leveling off at that point.

The improvement in life expectancy with increased age is least for the finance division. Although the proportion surviving the first year for this industry is second only to that for wholesale trade, by the age of 5½ years the life expectancy of firms in this division is only slightly higher than average.

The lowest life expectancy occurs in the case of newly acquired retail trade firms; on the average, a retail firm must attain an age of 3½ years before it has a life expectancy which is at least as great as a newly acquired wholesale firm.

As was noted above, the survival experience of all firms acquired during 1944-45 was somewhat better than that of

firms acquired in later years. This pattern was reflected in practically all major industries as shown in table 3. From 1945 through 1949 there was a rather steady downward trend in survival prospects for manufacturing concerns, which in the early period had a (one or more year) survival pattern approximating the all-industry average. A marked improvement was noted in this industry in 1950 bringing the first year survivors among newly acquired manufacturing firms again in line with that for all firms.

For most of the other areas, survival experience after the years of transition from war to peace showed no clear-cut trends either up or down. It is interesting to note, however, the almost uniform rise in mortality rates for younger firms in the mildly recessionary conditions of 1949. This is reflected, for example, in the data for 1948 where the proportions of new firms surviving at least one year fell for each of the eight industries covered in the study.

Minor industry survival patterns

No direct information on the survival experience of firms is available by minor industry groups. As is noted below, however, under conditions which maintain the business population at a constant age distribution and level, the survival pattern can be directly computed from the over-all rate at which firms are newly acquired or are sold or liquidated. These two rates are identical under these conditions. Since major departures from stability tend more or less to affect all groups, it is quite likely that turnover rates are indicative at least of the relative position of the minor industries with respect to survival patterns.

Table 5 presents average turnover rates from 1949 to 1951 for the major industries and for minor groups in manufacturing, retail trade and services. These minor groups are ranked (from lowest to highest turnover rates) within their respective industries. The last column of the table is presented primarily to show the correlation of major group "turnover" rankings with the rankings as measured by another index of survival experience, the median age achieved by new concerns in the 1945-50 period. As may be seen, the relative positions of the industries are rather close under the two methods. Hence it is believed that the ranks of the minor industry groups—available only from turnover data—may be taken as fairly reliable indexes of relative survival rates.

Within the retail trade division, for example, only three of the seven groups have discontinuance plus transfer rates in excess of that for all industries combined—filling stations, eating and drinking places, and the food and liquor group. Thus it may be that these divisions have life expectancies lower than average and that the life expectancy of firms in other lines of retail trade is better than average.

Within manufacturing the better records were achieved in printing and publishing and in the manufacture of paper and products; stone, clay and glass; and metals and metal fabrication. It may be noted that the relatively poor record for manufacturing as a whole is largely attributable to the lumber group in which the structure of the industry makes for extremely high turnover rates.

Transfers versus new businesses

The relative importance of newly established and of transferred firms among all newly acquired businesses may also be seen in table 5. In manufacturing, for example, nearly twice as many firms are newly established as are acquired by transfer. In retail trade, on the other hand, the opposite situation prevails, and it is more than twice as likely that a

newly acquired business will be purchased or otherwise acquired from other owners than that it will be an entirely new concern.

The entry rates or the discontinuance rates (as opposed to discontinuance and transfer rates combined) would probably give a good indication of the relative position of the industries with respect to survival from date of original establishment. It is not possible to eliminate transfers from the age distributions and hence a measure of age from the date of a firm's establishment, regardless of subsequent transfers, cannot be determined. Table 5 would suggest, however, that the survival experience of retail firms might be close to the all industry average. Or to take another example, it would appear from the table that the relatively good survival experience (based on data including transfers) already cited for wholesale trade might be exceeded by finance firms.

Age Characteristics of Operating Firms

The age distribution of firms in operation at any one time clearly depends not only on the survival patterns of newly acquired firms but also on past levels of acquisitions. The current over-all age distribution has been described above,

Table 5.—Annual Average Business Turnover Rates 1949-51 by Industry Division and Group and Industry Division Rank by Average Median Age Attained 1945-50

| | 1949-51 Annual average turnover rates ¹ | | | | Rank | |
|---|--|---------------------|---------------|-----------------------------------|----------------------------|--|
| | Entry rate | Discontinuance rate | Transfer rate | Discontinuance plus transfer rate | By rate sold or liquidated | By 1945-50 average median age attained |
| All industries..... | 98 | 84 | 112 | 207 | ..... | ..... |
| Mining and quarrying..... | 133 | 141 | 73 | 288 | 5 | 7 |
| Contract construction..... | 182 | 141 | 45 | 180 | 5 | 3 |
| Manufacturing..... | 139 | 150 | 71 | 221 | 7 | 6 |
| Food and kindred products..... | 45 | 175 | 83 | 258 | 9 | ..... |
| Textiles and textile products..... | 94 | 118 | 46 | 171 | 8 | ..... |
| Leather and leather products..... | 74 | 112 | 47 | 169 | 8 | ..... |
| Lumber and wood products..... | 280 | 288 | 50 | 303 | 10 | ..... |
| Paper and allied products..... | 90 | 78 | 46 | 124 | 2 | ..... |
| Printing and publishing..... | 81 | 30 | 71 | 110 | 1 | ..... |
| Chemicals and allied products..... | 84 | 107 | 81 | 225 | 8 | ..... |
| Stone, clay and glass products..... | 80 | 103 | 84 | 187 | 3 | ..... |
| Metals and metal products..... | 99 | 80 | 69 | 151 | 4 | ..... |
| Other manufacturing..... | 100 | 141 | 53 | 200 | 7 | ..... |
| Transportation, communication and other public utilities..... | 128 | 94 | 54 | 180 | 5 | 4 |
| Wholesale trade..... | 83 | 78 | 54 | 141 | 2 | 1 |
| Retail trade..... | 83 | 80 | 149 | 239 | 8 | 8 |
| General merchandise..... | 55 | 84 | 77 | 131 | 1 | ..... |
| Food and liquor..... | 85 | 90 | 142 | 232 | 6 | ..... |
| Automotive..... | 86 | 85 | 81 | 175 | 3 | ..... |
| Apparel and accessories..... | 58 | 80 | 74 | 154 | 3 | ..... |
| Eating and drinking places..... | 114 | 127 | 294 | 411 | 9 | ..... |
| Filling stations..... | 102 | 90 | 218 | 410 | 7 | ..... |
| Other retail trade..... | 75 | 67 | 63 | 150 | 2 | ..... |
| Finance, insurance and real estate..... | 64 | 65 | 55 | 112 | 1 | 2 |
| Service industries..... | 85 | 84 | 96 | 179 | 4 | 6 |
| Hotels and other lodging places..... | 69 | 90 | 124 | 242 | 6 | ..... |
| Personal services..... | 66 | 73 | 105 | 178 | 5 | ..... |
| Business services..... | 111 | 75 | 48 | 134 | 2 | ..... |
| Automobile repair..... | 66 | 101 | 73 | 178 | 4 | ..... |
| Miscellaneous repair..... | 100 | 76 | 86 | 233 | 5 | ..... |
| Motion pictures..... | 91 | 83 | 87 | 150 | 3 | ..... |
| Other amusements..... | 162 | 158 | 108 | 309 | 7 | ..... |

1. The number of new, discontinued or transferred firms during the period per 1,000 firms in operation at the beginning of the period. The turnover rates were computed separately for each of the years 1949-51; shown are the three-year annual averages.

2. Includes products of petroleum and coal.

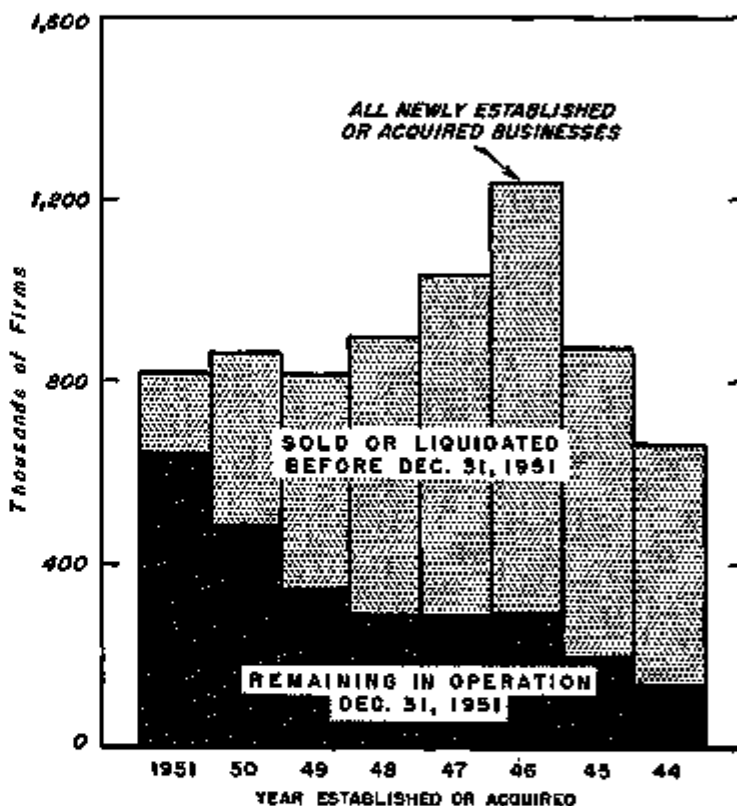
3. Includes tobacco, rubber products and miscellaneous manufactures.

Source: U. S. Department of Commerce, Office of Business Economics.

but may be briefly reviewed at this point to serve as background for the following more detailed discussion of age characteristics of business firms. Of the 4 million firms in operation at the end of 1951, half were younger than 4 years and 4 months and two-thirds had been newly established or acquired since the beginning of 1944. The chart shows the distribution of these younger firms by year of acquisition as well as the total number of firms newly acquired in each of the years 1944-51.

Firms in Operation in 1951

reflect timing and number of business acquisitions



U. S. DEPARTMENT OF COMMERCE, OFFICE OF BUSINESS ECONOMICS

82-184

The effect of previous levels of acquisitions upon the age distribution of firms in operation is evident from the chart. For example, the relatively large number of firms which were acquired in 1946 is now in operation because of the high birth rate which characterized that year. The almost equal numbers of all firms now operating which were acquired in each of the years 1946-49 follows in part, however, from the decline in number of acquisitions which occurred during this period. This effect of the heavy acquisitions during 1946 is even more apparent in each of the industry divisions, except retail trade and the service industries.

The age distribution of firms in operation as of December 31 for each of the years 1944-51 may be found for all firms combined in the left hand section of table 1 and for the major industry divisions in table 8. As already noted, it has been necessary to combine all firms acquired prior to 1944 in these tables. To facilitate comparison between the industry divisions, the age distributions of firms in operation December 31, 1951, are shown on a cumulative percentage basis in table 6 and in the chart.

Industry differences

For all industries combined only one-third of the firms in operation were as old as 7½ years, and conversely, about one-sixth were 6 months or less. The highest proportions of firms 7½ years and older at the end of 1951 are found in finance (49 percent) and in mining (43 percent), with manufacturing (37 percent) and the service industries (36 percent) also higher than average. Contract construction with 17 percent over 7½ years old; transportation with 28 percent; and retail and wholesale trade, each with 32 percent, are at the lower end of the scale.

It is of interest that this order contrasts very sharply with that obtained from the proportion of firms newly acquired in 1944 which survived 7½ years. Of the firms acquired in 1944, the proportion surviving to an age of at least 7½ years was lowest in retail trade (9.9 percent), with mining and quarrying (10.4 percent), and manufacturing (13.8 percent) faring not much better.

These differences in the ranking of industry divisions with respect to the proportion of firms newly acquired which attain a certain age and the proportion of firms in operation which are that age or older are not inconsistent. To some extent in all industries and particularly in the latter three industries mentioned above, there is a rather solid core of older and larger firms which have established their position in the market and have been successful in withstanding the fluctuations in business conditions. Around this core is the volatile element of the business population where firms are usually much smaller, capital requirements lower, and business turnover high.

Table 6.—Cumulative Percentages of Firms in Operation December 31, 1951, by Age of Firm and Median Ages of Firms in Operation December 31, 1945-51, by Major Industry Division

| | All industries | Mining and quarrying | Contract construction | Manufacturing | Transportation, communication, and other public utilities | Wholesale trade | Retail trade | Finance, insurance and real estate | Service industries |
|--------------------|---------------------------------|----------------------|-----------------------|---------------|---|-----------------|--------------|------------------------------------|--------------------|
| Age | Cumulative percentage | | | | | | | | |
| 0 years or older | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 0.5 years or older | 84.0 | 81.4 | 82.4 | 83.4 | 84.7 | 88.0 | 81.3 | 89.4 | 80.4 |
| 1.5 years or older | 71.0 | 73.2 | 68.2 | 71.2 | 73.4 | 78.3 | 67.8 | 81.0 | 70.1 |
| 2.5 years or older | 63.3 | 65.0 | 67.7 | 64.5 | 65.7 | 70.2 | 58.2 | 73.5 | 67.0 |
| 3.5 years or older | 56.1 | 57.9 | 56.4 | 58.6 | 58.8 | 62.4 | 50.6 | 71.0 | 60.8 |
| 4.5 years or older | 48.9 | 52.3 | 39.4 | 52.0 | 51.3 | 54.3 | 43.3 | 64.8 | 53.1 |
| 5.5 years or older | 41.6 | 47.0 | 28.2 | 45.3 | 42.4 | 44.8 | 30.8 | 50.7 | 45.1 |
| 6.5 years or older | 35.0 | 44.5 | 20.8 | 30.2 | 35.1 | 37.5 | 23.0 | 54.3 | 40.7 |
| 7.5 years or older | 33.0 | 42.8 | 17.3 | 34.0 | 28.2 | 32.4 | 31.8 | 48.7 | 35.6 |
| Years of operation | Median ages December 31 (Years) | | | | | | | | |
| 1945 | 2.0 | 4.2 | 2.2 | 2.2 | 2.3 | 3.0 | 3.0 | 4.0 | 2.7 |
| 1946 | 2.8 | 4.8 | 1.3 | 2.6 | 2.3 | 2.9 | 2.8 | 4.5 | 2.8 |
| 1947 | 2.8 | 5.0 | 1.8 | 2.6 | 2.0 | 3.0 | 2.5 | 5.0 | 3.0 |
| 1948 | 3.1 | 4.5 | 2.1 | 3.1 | 3.1 | 2.3 | 2.6 | 6.7 | 3.4 |
| 1949 | 3.5 | 4.9 | 3.7 | 4.0 | 3.7 | 3.0 | 3.0 | 8.3 | 3.9 |
| 1950 | 3.0 | 4.8 | 3.0 | 4.4 | 4.2 | 4.4 | 3.3 | 6.8 | 4.4 |
| 1951 | 4.3 | 5.1 | 3.3 | 4.9 | 4.0 | 4.0 | 3.6 | 7.3 | 4.9 |

Sources: U. S. Department of Commerce, Office of Business Economics.

Cumulative Age Distribution of Firms in Operation, December 31, 1951, by Major Industry Divisions

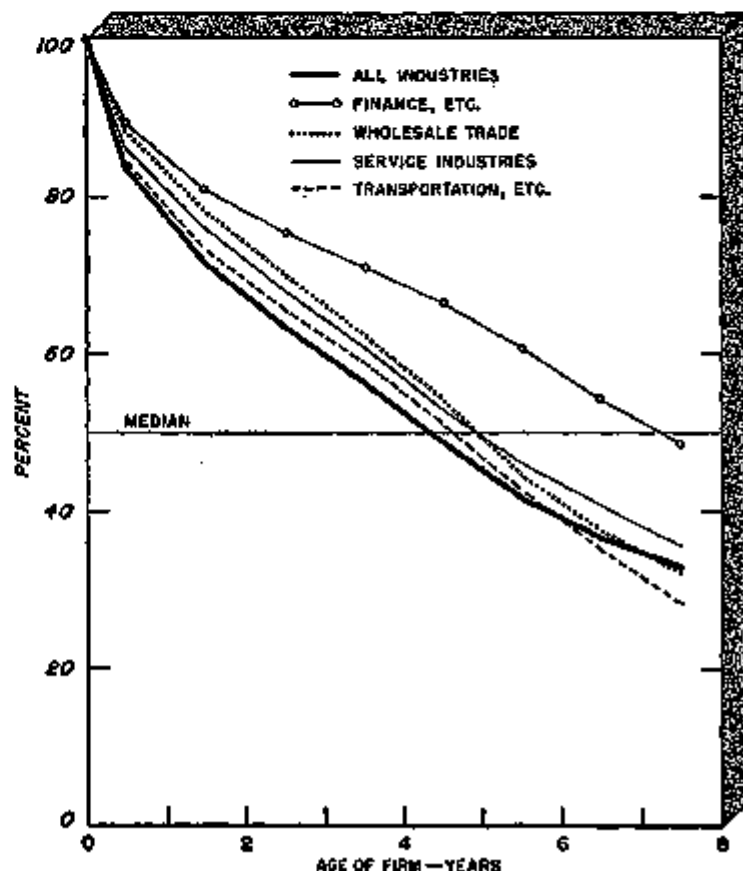
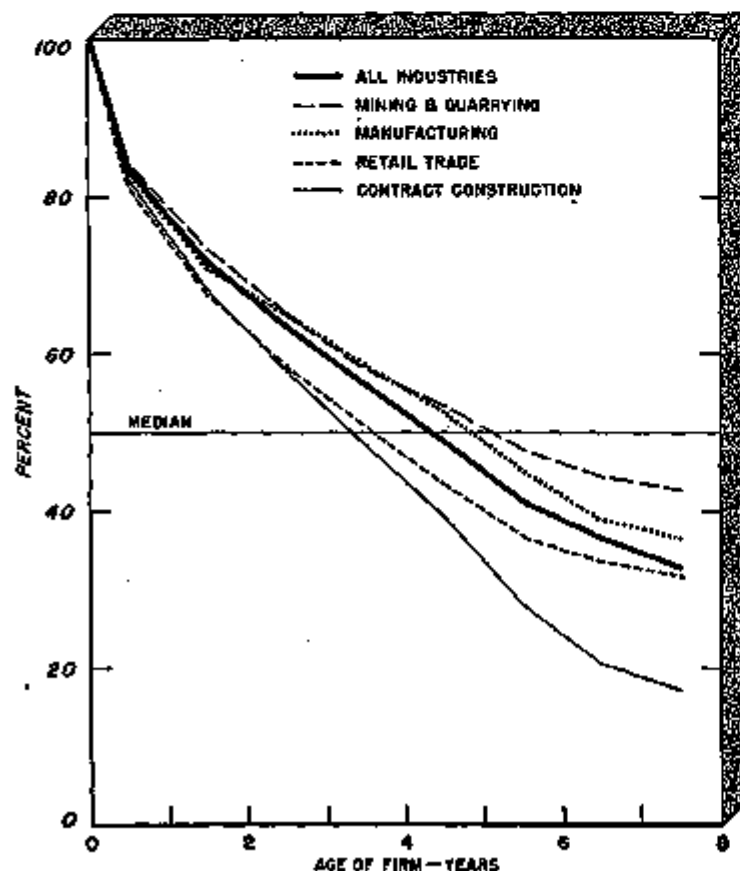


Table 7.—Median Ages of Firms Sold or Liquidated by Major Industry Division, 1945-51

| Year sold or liquidated | (Years) | | | | | | | |
|-------------------------|----------------|----------------------|-----------------------|---------------|--|-----------------|--------------|------------------------------------|
| | All industries | Mining and quarrying | Contract construction | Manufacturing | Transportation, communication and other public utilities | Wholesale trade | Retail trade | Finance, insurance and real estate |
| 1945..... | 1.5 | 1.7 | 1.5 | 1.4 | 1.4 | 2.4 | 1.4 | 2.7 |
| 1946..... | 1.3 | 1.5 | 1.5 | 1.3 | 1.1 | 2.3 | 1.2 | 2.3 |
| 1947..... | 1.8 | 1.4 | 1.1 | 1.2 | 1.3 | 1.8 | 1.3 | 2.3 |
| 1948..... | 1.5 | 1.3 | 1.3 | 1.0 | 1.0 | 2.0 | 1.4 | 2.4 |
| 1949..... | 1.7 | 1.0 | 1.0 | 1.0 | 1.0 | 2.4 | 1.0 | 2.0 |
| 1950..... | 1.8 | 1.7 | 1.8 | 2.1 | 2.0 | 2.7 | 1.7 | 2.3 |
| 1951..... | 1.7 | 1.6 | 1.8 | 1.7 | 1.7 | 3.0 | 1.0 | 2.7 |

Source: U. S. Department of Commerce, Office of Business Economics.

The business population increased rapidly from 1943 until the middle of 1948 and has since changed but little. Shifts in its age composition during the postwar period as well as in the relative positions of the major industry divisions with respect to age are illustrated by the lower section of table 6 which shows the median ages of firms in operation December 31 of each year 1945-51.

From December 31, 1945, to the end of 1947 the median age of all operating businesses declined slightly as would be expected in a period of rapid growth in the business population. Thereafter it increased steadily. However, only two of the major industry divisions—retail trade and manufacturing—show this movement. In the transportation, finance, and service industries, the median ages of firms in operation advanced steadily from 1945 to 1951.

Table 8.—Number of Firms in Operation December 31, 1944-51, by Year of Acquisition and by Major Industry Division

| Year of acquisition | (Thousands) | | | | | | | |
|---------------------|----------------|----------------------|-----------------------|---------------|--|-----------------|--------------|------------------------------------|
| | All industries | Mining and quarrying | Contract construction | Manufacturing | Transportation, communication and other public utilities | Wholesale trade | Retail trade | Finance, insurance and real estate |
| 1945..... | 851.3 | 7.0 | 81.0 | 64.7 | 30.0 | 27.6 | 400.0 | 44.4 |
| 1946..... | 864.8 | 7.5 | 87.0 | 66.4 | 35.0 | 28.4 | 430.0 | 43.9 |
| 1947..... | 818.4 | 6.8 | 76.1 | 54.0 | 31.3 | 28.1 | 427.4 | 38.6 |
| 1948..... | 890.0 | 9.2 | 82.3 | 67.4 | 35.9 | 32.9 | 453.1 | 38.4 |
| 1949..... | 1,033.7 | 8.0 | 92.3 | 92.3 | 42.9 | 40.2 | 515.2 | 48.3 |
| 1950..... | 1,238.5 | 8.0 | 112.8 | 118.4 | 55.7 | 51.4 | 689.3 | 51.8 |
| 1951..... | 877.4 | 6.3 | 85.3 | 71.6 | 30.1 | 34.0 | 429.8 | 38.1 |
| 1944..... | 803.4 | 6.8 | 34.0 | 51.8 | 33.0 | 25.8 | 312.1 | 40.5 |
| Prior to 1944..... | 2,086.8 | 31.2 | 237.8 | 110.5 | 140.2 | 1,370.0 | 308.8 | 638.8 |
| Total..... | 16,200.0 | 89.5 | 780.2 | 513.2 | 430.4 | 489.5 | 1,837.0 | 657.0 |

| Firms in operation December 31, 1951 | | | | | | | | |
|--------------------------------------|---------|------|-------|-------|-------|-------|---------|-------|
| 1951..... | 843.2 | 5.3 | 60.7 | 70.5 | 32.0 | 25.8 | 310.8 | 37.6 |
| 1950..... | 894.7 | 5.8 | 64.5 | 77.3 | 33.0 | 21.5 | 325.0 | 39.1 |
| 1949..... | 845.2 | 2.8 | 40.0 | 30.2 | 15.9 | 18.5 | 180.8 | 19.7 |
| 1948..... | 880.8 | 2.4 | 35.4 | 18.4 | 14.5 | 18.2 | 124.7 | 15.0 |
| 1947..... | 880.7 | 1.0 | 34.1 | 17.0 | 15.6 | 17.0 | 124.7 | 15.0 |
| 1946..... | 896.2 | 1.8 | 42.6 | 22.3 | 18.7 | 20.2 | 108.5 | 20.7 |
| 1945..... | 109.3 | 1.2 | 28.2 | 78.5 | 15.1 | 14.8 | 62.5 | 22.8 |
| 1944..... | 141.0 | 1.0 | 13.2 | 7.1 | 14.8 | 10.0 | 31.0 | 18.6 |
| Prior to 1944..... | 1,320.0 | 14.8 | 65.8 | 122.2 | 58.8 | 67.5 | 822.4 | 172.7 |
| Total..... | 4,814.8 | 34.1 | 388.3 | 384.3 | 208.6 | 204.4 | 1,844.4 | 351.6 |

Table 9.—Number of Firms in Operation December 31, 1944-51, by Year of Acquisition and by Major Industry Division—Continued

| Year of acquisition | (Thousands) | | | | | | | |
|---------------------------------------|----------------|----------------------|-----------------------|---------------|--|-----------------|--------------|------------------------------------|
| | All industries | Mining and quarrying | Contract construction | Manufacturing | Transportation, communication and other public utilities | Wholesale trade | Retail trade | Finance, insurance and real estate |
| Firms in operation December 31, 1950 | | | | | | | | |
| 1950..... | 860.2 | 5.7 | 72.5 | 52.0 | 30.2 | 25.8 | 332.6 | 37.2 |
| 1949..... | 470.4 | 3.7 | 40.6 | 28.5 | 18.4 | 10.9 | 230.4 | 24.3 |
| 1948..... | 802.1 | 2.0 | 41.7 | 24.2 | 17.1 | 15.4 | 163.1 | 15.6 |
| 1947..... | 345.2 | 2.0 | 30.0 | 22.4 | 17.7 | 13.0 | 180.4 | 15.3 |
| 1946..... | 344.5 | 2.2 | 40.8 | 27.3 | 24.7 | 22.1 | 133.0 | 23.3 |
| 1945..... | 324.7 | 1.4 | 30.0 | 20.7 | 10.0 | 15.7 | 65.9 | 24.3 |
| 1944..... | 187.4 | 1.7 | 14.0 | 8.6 | 13.2 | 11.2 | 30.6 | 21.0 |
| Prior to 1944..... | 1,475.1 | 15.5 | 72.0 | 118.0 | 61.9 | 72.7 | 371.9 | 181.2 |
| Total..... | 3,385.6 | 34.1 | 305.8 | 302.1 | 188.2 | 205.0 | 1,478.5 | 349.2 |
| Firms in operation, December 31, 1949 | | | | | | | | |
| 1949..... | 844.6 | 5.4 | 62.4 | 41.5 | 25.5 | 25.2 | 328.5 | 31.0 |
| 1948..... | 402.1 | 4.4 | 51.1 | 24.1 | 21.0 | 22.7 | 232.5 | 24.8 |
| 1947..... | 425.8 | 2.7 | 47.8 | 30.1 | 20.8 | 22.3 | 196.8 | 21.9 |
| 1946..... | 415.9 | 2.0 | 62.5 | 34.8 | 23.2 | 26.2 | 107.7 | 25.0 |
| 1945..... | 308.4 | 1.0 | 32.1 | 23.5 | 17.3 | 17.2 | 85.0 | 26.2 |
| 1944..... | 180.5 | 1.9 | 16.1 | 16.4 | 15.1 | 12.2 | 31.5 | 22.0 |
| Prior to 1944..... | 1,026.2 | 16.5 | 78.0 | 127.9 | 65.5 | 78.1 | 325.4 | 191.2 |
| Total..... | 3,953.3 | 34.1 | 329.5 | 342.4 | 169.9 | 202.9 | 1,487.5 | 354.5 |
| Firms in operation, December 31, 1948 | | | | | | | | |
| 1948..... | 765.4 | 7.0 | 66.5 | 32.8 | 28.4 | 28.7 | 345.3 | 32.5 |
| 1947..... | 588.9 | 4.3 | 60.1 | 46.2 | 28.4 | 27.5 | 274.9 | 27.6 |
| 1946..... | 550.7 | 3.4 | 60.8 | 47.0 | 27.2 | 28.9 | 218.8 | 31.2 |
| 1945..... | 506.3 | 2.0 | 35.8 | 28.1 | 19.0 | 16.0 | 106.6 | 28.7 |
| 1944..... | 208.9 | 1.2 | 15.6 | 13.1 | 17.1 | 13.4 | 60.1 | 24.4 |
| Prior to 1944..... | 1,048.8 | 17.7 | 80.0 | 136.1 | 70.1 | 84.7 | 388.0 | 201.3 |
| Total..... | 3,981.1 | 35.4 | 327.8 | 333.3 | 169.1 | 203.1 | 1,701.3 | 348.0 |
| Firms in operation, December 31, 1947 | | | | | | | | |
| 1947..... | 832.6 | 6.4 | 78.5 | 64.8 | 35.3 | 35.2 | 404.4 | 35.2 |
| 1946..... | 894.2 | 4.8 | 73.3 | 60.0 | 34.1 | 36.3 | 305.2 | 37.5 |
| 1945..... | 378.0 | 2.5 | 39.4 | 34.4 | 21.6 | 21.7 | 140.2 | 22.0 |
| 1944..... | 245.6 | 1.8 | 18.0 | 10.2 | 18.6 | 14.8 | 34.7 | 29.3 |
| Prior to 1944..... | 1,790.0 | 19.4 | 95.1 | 148.2 | 78.5 | 92.4 | 708.8 | 214.4 |
| Total..... | 3,947.4 | 34.3 | 384.7 | 338.2 | 185.0 | 200.6 | 1,599.4 | 345.9 |
| Firms in operation, December 31, 1946 | | | | | | | | |
| 1946..... | 875.3 | 6.5 | 64.1 | 64.7 | 44.8 | 45.0 | 448.2 | 45.2 |
| 1945..... | 800.4 | 3.4 | 45.8 | 43.2 | 26.0 | 25.0 | 212.7 | 34.0 |
| 1944..... | 302.7 | 2.0 | 20.5 | 21.0 | 20.8 | 17.4 | 115.0 | 29.8 |
| Prior to 1944..... | 1,832.3 | 21.3 | 104.0 | 103.1 | 81.8 | 102.8 | 854.0 | 220.0 |
| Total..... | 3,782.7 | 33.2 | 288.3 | 321.0 | 173.4 | 190.3 | 1,631.7 | 342.2 |
| Firms in operation, December 31, 1945 | | | | | | | | |
| 1945..... | 798.8 | 5.0 | 67.4 | 68.3 | 33.3 | 31.2 | 328.5 | 43.5 |
| 1944..... | 400.7 | 2.8 | 24.1 | 20.6 | 24.1 | 28.7 | 107.2 | 34.7 |
| Prior to 1944..... | 2,208.9 | 23.5 | 116.4 | 180.0 | 60.4 | 115.3 | 108.5 | 261.4 |
| Total..... | 3,398.3 | 31.3 | 198.9 | 278.8 | 147.7 | 167.2 | 1,494.4 | 329.6 |
| Firms in operation, December 31, 1944 | | | | | | | | |
| 1944..... | 656.1 | 4.8 | 36.2 | 42.4 | 28.9 | 24.1 | 253.0 | 40.9 |
| Prior to 1944..... | 2,687.1 | 20.7 | 120.0 | 200.0 | 161.1 | 128.0 | 1,167.9 | 277.3 |
| Total..... | 3,343.2 | 25.5 | 156.2 | 242.4 | 190.0 | 152.1 | 1,420.9 | 318.2 |

1. See footnote 2, table 1.

Note.—Detail will not necessarily add to totals because of rounding.

Source: U. S. Department of Commerce, Office of Business Economics.

Comparison with census of business

The 1948 Census of Business classifies establishments engaged in retail trade by year of acquisition. Although the

proportion of establishments which failed to report the date of acquisition is rather large (12 percent), when those single unit establishments which did report are arrayed by age of firms, the agreement with the business population data presented here for retail trade is striking.

The median age of 1948 Census single unit establishments (2.6 years) agrees with that found for the 1948 retail business population. Furthermore the two cumulative age distributions are very similar up to the age of 4½ years when the business population information breaks off.

Age composition of firms sold or liquidated

Table 7 presents, by industry division, the median ages of businesses sold or liquidated. Comparison of these data with the other median age tables clearly indicates that the average age of firms sold or liquidated is much lower than attained by new firms or than that of concerns in operation. This supports the findings, discussed above, that problems of survival are most formidable in earlier years of business life.

Survival patterns vs. age distributions

Age distributions of existing businesses or of firms sold or liquidated have sometimes been used to represent survival patterns of newly acquired businesses. It is of interest, therefore, to examine the actual relationship between survival patterns and age distributions of (a) operating businesses and (b) firms sold or liquidated. It can be shown that only under static conditions—that is, births equalling deaths over an extended period of time, and the number of operating businesses remaining constant with respect to both level and age distribution—will the age distributions give a true image of the survival pattern of new firms.

The above conditions have not been approached except possibly for rather brief intervals of time. As may be seen from the long-term growth of the business population, business births have, on the average, exceeded business deaths. The postwar period was characterized by very

rapid growth in the number of operating businesses until the middle of 1948 when the business population leveled off. However, throughout the period, young firms were found to be the most vulnerable, having death rates considerably in excess of older firms.

The relationship between the survival patterns of firms acquired in 1944 and of firms in operation December 31, 1951, for all industries combined can be seen in the first chart. These particular years were chosen to allow showing each of the distributions up to the maximum age present data permit. The use of other years would not affect the picture significantly.

The cumulative age distribution of firms in operation December 31, 1951, exceeds the survival pattern of firms acquired in 1944 at all ages and both these distributions exceed the cumulative age distribution of firms sold or liquidated during 1951 (not shown in the chart). Considerable error would obviously be introduced by substituting any one of these distributions for one of the other two.

It is of interest that the relationship between the survival pattern and the two age distributions found for all industries combined is duplicated in only two of the major industry divisions—finance and the service industries. In wholesale trade, the cumulative age distribution of firms in operation is not greatly different from the survival pattern, but both exceed the cumulative age distribution of firms sold or liquidated. The same tendency is apparent, particularly at the younger ages, in contract construction and in transportation. In the remaining major industry divisions—retail trade, manufacturing and mining—although the survival patterns and the cumulative distribution of firms sold or liquidated nearly coincide, the cumulative age distribution of firms in operation far exceeds both.

The similarities or the differences between the distributions within the industries can, of course, be explained through consideration of such factors as past patterns of acquisitions in the industry together with the survival experience of newly acquired firms, and the recent rate of growth or decline in the industry.

U. S. Direct Investments in Foreign Countries

(Continued from Page 11)

which they are located. This item can not be accurately evaluated but may be well in excess of \$500 million.

Other reductions have been made to eliminate certain companies no longer considered United States direct investments, such as foreign branches and subsidiaries of enterprises incorporated here but owned by foreigners (\$240 million) and foreign corporations whose stock is widely held in the United States but without American-controlling participation in management (\$140 million).

Finally, certain items such as exploration losses and depletion charges, which appear as capital outflows in the balance of payments, are not included as capital investments in the books of the reporting companies; these items amounted to approximately \$200 million by the end of 1950. To some extent these reductions in the former estimates were offset by investments made since the war which were not previously recorded, as well as various upward adjustments on the foreign books.

Technical Notes

Census definitions and methods of compilation:

Definition: As used for the purpose of this census, the term foreign direct investments includes the following:

1. The value of the United States equity in foreign business organizations owned to the extent of 25 percent or more of the voting securities of the foreign corporations, by persons, or groups of affiliated persons, ordinarily resident in the United States, and analogous interests in partnerships and other organizations.
2. The United States equity in foreign corporations whose voting stock is publicly held within the United States to an aggregate extent of 50 percent or more but distributed among stockholders so that no one investor or affiliated group of investors owns more than 25 percent.
3. Ownership of real property, other than property held solely for the personal use of the owner, or of a sole proprietor type of business enterprise.
4. The net assets of foreign branches of United States companies. A branch is defined as a

business enterprise conducted abroad by a United States corporation in its own right and not through a subsidiary foreign company.

The United States equity in these types of controlled foreign enterprises includes the book value of all capital stock held in the United States, whether by the parent company or others, the equity of these stockholders in surplus and reserves, the net balance of intercompany accounts between the foreign enterprise and its parent organization or United States affiliates of the parent organization, and long-term indebtedness payable to the parent company or nonaffiliated United States persons, to the extent that information regarding the latter indebtedness was available.

Since information was not specifically requested regarding the extent of the foreign organizations' liabilities to United States interests other than the parent, or regarding the assets held in the United States by the foreign organizations aside from accounts payable by the parent company, the data may in some cases overstate or understate the equity in net foreign assets controlled by United States interests in direct-investment enterprises abroad.

Source: Results in the census were mandatory under authority granted in the Bretton Woods Agreements Act. Forms and instructions were mailed to all known holders of reportable investments. Foreign direct investments not included in the census are probably relatively insignificant in relation to the total value reported, although they may be large in number.

Reports for investments located in countries with Communist governments were incomplete, and, when reported, the information was generally applicable to an earlier date and was unreliable. Consequently, investments in these countries except Yugoslavia have been omitted entirely from the 1950 data.

Values: The dollar values represent the amounts carried on the books of the foreign organization converted into United States dollars. Where these conversions were ordinarily made on their own books by reporters they were required to submit their reports in both foreign currency and United States dollars.

If the reporter did not ordinarily convert the foreign currency into United States dollars, the report was submitted in foreign currency only. Reports submitted in foreign currencies only were converted to United States dollars by using the average rate of conversion derived from reports employing both currencies. Reporters that submitted statements in both currencies usually converted to United States dollars by using the exchange rate current at the date of the report to convert current assets and liabilities.

Fixed assets and related depreciation reserves were generally converted at the rate current at the time the assets were acquired. To the extent that fixed assets were acquired at exchange rates higher than the rate of exchange current at the date of the report, this method of converting to United States dollars resulted in average conversion rates somewhat higher than the rates current at the end of 1950.

This method is different from that employed in previous surveys where, generally, all amounts were converted at the then current rates of exchange. The values arrived at conform as nearly as possible to standard accounting practices but, as mentioned in the text, they are generally lower than market values or replacement costs at current price levels.

Industry classification: The reports submitted were financial reports consolidating all the activities of a foreign corporation or branch operation. No breakdown based on type of activity was required. The reports were therefore classified on the basis of what was considered to be the major field of activity.

In a few instances, foreign corporations have established subsidiary companies to handle incidental functions which might ordinarily have been the responsibility of a division within